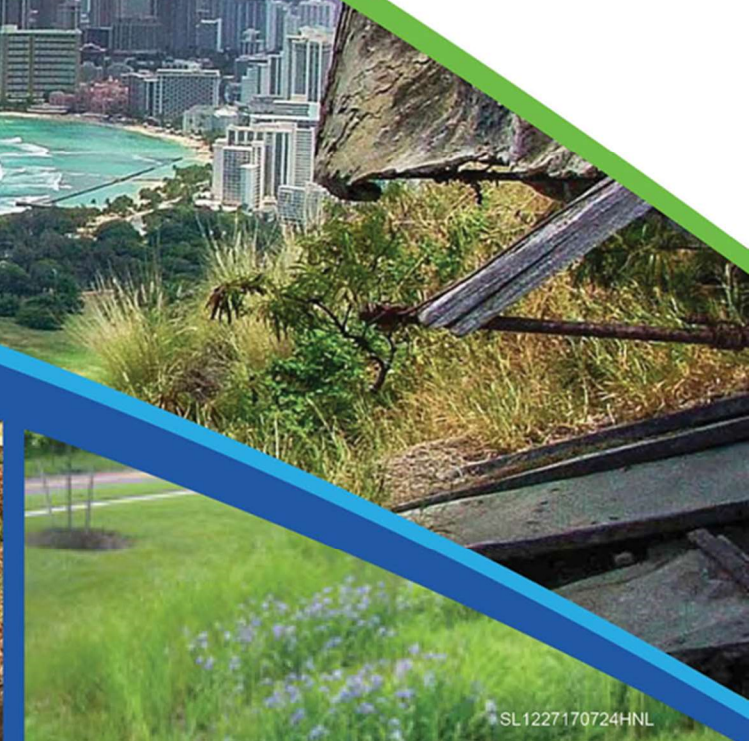
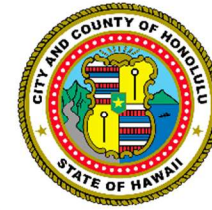


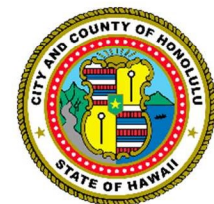
City Storm Water Construction Workshop

July 16-19, 2018, Neal Blaisdell Center



What if the Big One Came? Are You Ready?

- Welcome
- Dean Strawn – RME-Contractor
- Kent Untermann – Property Owner



Kiai Ridge

- ❑ Three Acre Hillside Project – High Visibility



My Key Takeaways:

- ❑ **Learn the laws** and regulations and that they have changed a lot. There are regulations for Erosion Control, Drainage and Water Quality and they are all there for specific reasons.
- ❑ Don't look at the city inspectors and others as the "enemy;" embrace them. **Erosion Control is one of the primary areas of concern** for the Inspector. Making sure the Inspector is "on board" with the installed erosion elements is very crucial.
- ❑ Having great consultants and a caring contractor is critical. Dean did not have a lot of experience, but he listened to Jennifer and the Inspector. Dave Bills has been invaluable in driving conservative practices to the site.
- ❑ Developing is hard, and getting harder. The city officials have it equally hard. They are constantly being bombarded by politicians, new federal regulations, and property owners, while trying to do their job... **Newfound appreciation for developers and Government officials.**
- ❑ **Now I know why Developers stay away from Hillsides.**

The risk of doing too much far outweighs the risk of not doing enough.

The Shopping Center – Aina Haina



Aina Haina Shopping Center – From Flood



Keikilani Street after Flood (before Clean Up)













We Got Lucky – Thank Thy Neighbor

- ❑ There are 2-3 neighbors that enjoy calling the city, writing letters, taking pictures, videos etc.
- ❑ We knew this, we tried to embrace it (which was very hard at times), but in the end it was the “difference”.
- ❑ We received a NOV-worked with the city, fixed the issues, and watched the relentless rain. Dean would improve our BMP's on every major rain.
- ❑ We monitored daily rainfall, looked at the streets, etc.

Major Factors That Prevented Erosion

- ❑ What we learned or keys to performing like we did, with all the rain in order:
- ❑ —Benching the hillside and having a lot of rock to absorb rainfall helped the most
- ❑ —Next was the protective cloth we put over the clay soil to prevent erosion
- ❑ —Finally were the silt fences we put up
- ❑ —Lastly, that the rain stopped when it did. Our last silt fence was just about ready to be breached.
- ❑ **Sometimes it is better to be lucky.....**

Conclusion

- ❑ Glad this is my last Home to build
- ❑ We are very grateful this all went well. We have a lot of work left to do and do not want to sound arrogant at all. We want to thank the neighbors, city inspectors, and mother nature for allowing us to get “prepared”.
- ❑ It will only get harder for builders and government officials. We may as well embrace it and work together.
- ❑ I love Hawaii and the hardest thing has been the “haters”. Let’s each do our part to keep the “Aloha” in Hawaii.
- ❑ Thanks for listening – Q & A